

REMARKS

Reconsideration of this application is respectfully requested.

In response to the objection to the Information Disclosure Statement filed October 2, 2003, applicants submit herewith a Second Supplemental Information Disclosure Statement and the fee of \$180.00.

Claim 4 has been amended to overcome the rejection under 35 U.S.C. §112. The Amendment is supported by page 11, line 19.

Claim 13 has been amended to describe injecting the reaction mixture into an empty mold. This claim describes a solid polyurethane golf ball and is supported by Figure 1, page 10, lines 22-26, and page 15, lines 17-18.

Claims 1-15 were rejected as unpatentable over Lutz in view of Hoy, et al. Claims 16-19 were rejected as unpatentable over Lutz in view of Weber, et al. Claim 20 was rejected as being anticipated by Lutz. However, a fundamental difference between Lutz and claims 1-20 is that Lutz merely describes a urethane coating on a golf ball cover whereas claims 1-12 and 16-20 describe a golf ball in which the cover of the golf ball is formed from reaction injection molded thermoset polyurethane.

Claims 13-15 describe forming a solid golf ball from reaction injection molded thermoset polyurethane.

Claim 1 describes forming a cover on a golf ball and includes the step of injecting the reaction mixture into the mold

to cover the golf ball product therein.

Claim 13 describes injecting the reaction mixture into an empty mold to form a golf ball product.

Claim 16 describes the step of forming a cover layer about said golf ball component from said first reactant and said second reactant.

Claim 20 describes the step of forming a cover layer about said golf ball component from said first reactant and said second reactant.

In contrast to the claims, Lutz describes a method of in-mold coating of golf balls. Lutz defines the term "coating" in column 4, lines 47-52:

"As used herein, the term 'coating' means a material applied to the outer surface of a golf ball cover which may be opaque or transparent, i.e., known as a 'clear coat', which may impart a glossy or shiny appearance to the ball and which may provide some measure of protection and/or durability to the cover of the ball."

Lutz's definition of "coating" is consistent with the meaning of that term in the golf ball industry. Applicants submit herewith a Declaration Under 35 U.S.C. §1.132 in which the applicant Frank Simonutti explains the disclosure of Lutz in which a coating is applied to the cover of a golf ball and the difference between Lutz's coating and the cover of a golf ball.

A golf ball typically includes as its structural components a core and a cover. The cover has a dimpled surface for providing aerodynamic properties. Some one-piece golf balls include a homogeneous body which does not include a separate core

and a separate cover. The outer surface of such a one-piece golf ball is dimpled. Other multi-layer golf balls include a core and two or more cover layers or a mantle and one or more cover layers. In each case the outer cover layer is dimpled. For all such golf balls, a coating may be applied to the dimpled outer surface of the cover to provide gloss and/or color to the outer surface of the cover.

The cover of a golf ball is a structural component which provides, inter alia, durability, resilience, and aerodynamic dimples. As described on pages 1-7 of this application, golf ball covers have historically been made from many materials, including balata, ionomers, other thermoplastic materials including polyurethane, and thermoset materials including polyurethane. The cover material is molded or cast over the core or mantle layer to provide the complete golf ball, which includes the cover.

After the golf ball is formed by molding or casting the cover, the golf ball is generally provided with one or more coatings to provide color and/or gloss to the outer surface of the cover. This is explained, for example, in Proudfit Patent No. 5,000,458 and Shapiro Patent No. 5, 785,612, which are attached as Exhibits A and B to the Simonutti Declaration.

Proudfit describes in columns 1 and 2 the use of various coatings of clear epoxy primers, clear urethane, and a clear coat which includes an optical brightener. Proudfit is thus similar to Lutz in describing urethane coatings but not

urethane covers. In each case the coatings are applied to the outer surface of a golf ball cover. Column 3, lines 26-28 describe an outermost clear coat which consists of a two-component urethane.

Shapiro describes a golf ball which includes a coat of paint over the golf ball cover and a logo or identifying number formed from ultraviolet curable ink. Shapiro is also similar to Lutz in describing coatings which are allied over covers.

The coatings of golf balls are usually applied by spray guns, see, for example, column 4, line 10 to column 6, line 3 of Shapiro.

As previously explained, claims 1-12 and 16-20 of this application describe forming a cover of a golf ball from a reaction mixture of thermoset polyurethane material which is injected into a mold. Claims 13-15 describe forming a solid golf ball by injecting a polyurethane thermoset reaction mixture into an empty mold.

In contrast to applicants' claims, Lutz describe a coating which is applied to the outer surface of a golf ball cover and does not describe forming a cover by injecting a polyurethane thermoset reaction mixture into a mold. Lutz specifically defines the term "coating" as a material which is applied to the outer surface of a golf ball cover. The coating which is described in Lutz is therefore not a golf ball cover but is a separate component which is applied to the golf ball cover.

The distinction between a golf ball cover and a golf

ball coating is made clear by the disclosure of Lutz. Columns 1 and 2 describe conventional golf balls which include a cover and a core. Column 2, beginning at line 33, describes prior art coatings which are used to provide gloss and enhanced appearance. Column 2, lines 52-53 state that in-mold coating of substrates is known, but has never before been used to coat golf balls. The Summary of the Invention states that "the present invention is directed to a process for in-mold coating of golf balls. The phrase 'in-mold coating', as used herein, refers to the application of a coating material to a golf ball while the ball is in a mold." Column 4, line 66 to column 5, line 4 states that the "in-mold coating materials appropriate for use in the present invention include any thermoplastic or thermosetting resin suitable for use with one or more of the conventional golf ball cover materials such as balata, ionomers, including acrylic and methacrylic acid based ionomers, urethanes, styrenes and olefinic polymers, to name but a few." Column 7, lines 14-38 describe the preferred embodiment of the method in which a golf ball cover is molded to form a golf ball and then a golf ball coating material is introduced into the mold to coat the outer surface of the golf ball cover.

As stated in the accompanying Declaration Under 37 C.F.R. §1.132, the terms "cover" and "coating" have well-accepted meanings in the golf ball art. The term "cover" refers to the outer layer of relatively hard material which is usually formed of balata, ionomers, or polyurethane. The cover has dimples

formed therein to provide aerodynamic properties, and the properties of the cover are selected to provide desired physical properties of the golf ball such as hardness, resilience, distance, spin rate, feel, and sound. The term "coating" means a material which is applied in a relatively thin layer to the dimpled outer surface of the golf ball cover. The coating may affect the appearance of the golf ball but is not considered as affecting the physical properties of the golf ball such as hardness, resilience, distance, spin rate, feel, and sound.

In the golf ball industry the term "golf ball" is used to refer to the core and the molded cover which has dimples formed therein whether or not the outer surface of the golf ball cover has a coating. The coating is used primarily to provide improved appearance and consumer acceptance. Many golf ball manufacturers test golf balls for physical properties without first applying a coating to the outside cover of the golf ball because the coating does not affect the measurements of the physical properties.

The use of the term "golf ball" to refer to the product with the dimpled outer surface without a coating is exemplified by Lutz. For example, column 3, lines 20-21 and lines 59-61 refer to "the application of a coating material to a golf ball". Column 4, lines 4-5 refer to forming a golf ball suitable for coating. Column 7, lines 15-25 refers to the process of molding a golf ball suitable for coating. The two independent claims describe a method of applying a "coating material to an outer

dimpled surface of a golf ball".

The Examiner has referred to the disclosure of Lutz of mixing a polyurethane prepolymer and a curing agent to form a thermoset reaction mixture, injecting the reaction mixture into the mold to cover the golf ball product therein, allowing the reaction mixture to gel and form a golf ball, and opening the mold and removing the golf ball after the injecting step. However, that disclosure of Lutz relates to forming a coating on the outer surface of the golf ball cover and does not disclose or suggest forming a golf ball cover from a thermoset reaction mixture. It would not have been obvious from Lutz to form a golf ball cover from a thermoset reaction mixture. Contrary to the Examiner's statement, the coating does not form the golf ball. Rather, the coating is applied after the golf ball is formed by molding the dimpled cover over the core.

In view of the foregoing, it is respectfully requested that the Examiner withdraw the rejection of claims 1-20 as unpatentable over Lutz either alone or in combination with Hoy or Weber.

Claims 16-20 were rejected under 35 U.S.C. §102(e) as being anticipated by Kennedy. However Kennedy is not a proper reference under 35 U.S.C. §102(e) for either of two reasons:

1. The effective filing date of claims 16-20 is October 21, 1998 whereas the effective filing date of the claims of Kennedy is October 1, 1999.

2. Applicants conceived and reduced to practice the

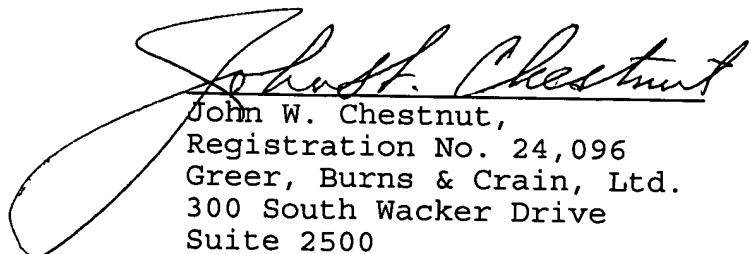
invention of claims 16-20 before the filing date of Kennedy's parent application, Serial No. 09/040,798.

The preliminary amendment filed September 19, 2002 explains in detail on pages 8-12 why applicants' claims 16-20 are entitled to a filing date of October 21, 1998, the filing date of applicants' parent application Serial No. 09/176,445, and why the effective filing date of Kennedy is October 1, 1999. Kennedy's disclosure of a first heating step in which the first reactant is heated to a temperature below 100 degrees F. was not filed until October 1, 1999, and applicants' claim 16 is not anticipated by Kennedy.

Pages 12-13 of the Preliminary Amendment explain why claims 16-20 cannot be rejected as unpatentable over Kennedy under 35 U.S.C. 102(e) on the basis of either Kennedy or Kennedy's parent application, Serial No. 09/004,798. Applicants conceived and reduced to practice their invention before the filing date of Kennedy Serial No. 09/004,798 as stated in the Declaration Under 37 C.F.R. §1.131 which was mailed to the Patent and Trademark Office on September 18, 2002. In view of the Examiner's failure to mention the Declaration Under 37 C.F.R. §1.131, It is possible that the Declaration is not in the Examiner's file. Applicants submit herewith a copy of the Declaration without the exhibits. If the Examiner is unable to locate the original of the Declaration with the exhibits, applicants will resubmit the exhibits.

In view of the foregoing, reconsideration and allowance of this application is respectfully requested.

Respectfully submitted,


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